

Number	Name	Function	Sensory Ganglion	Parasympathetic Ganglion	Symptoms
I	Olfactory	Special: smell	Specialized cells in olfactory epithelium		Loss of smell
II	Optic	Special: vision	Ganglion cells in the retina		Blindness
III	Oculomotor	Motor: extraocular muscles moves the eye ball <i>Mixed somatic and visceral afferent</i>			Double vision, Upper eyelid closed (ptosis), dilated pupil. Levator palp. super.- muscle that lifts eyelid
		Parasympathetic: smooth muscle of pupillary sphincter and ciliary muscle		Ciliary Ganglion	
IV	Trochlear	Motor: moves the eye to direct pupil down and out			Double vision
V	Trigeminal: Ophthalmic	Sensory: Skin of forehead, eyebrow, skin of upper eyelid, skin of medial nose, cornea	Trigeminal ganglia		Numbness to forehead, scalp, orbit, upper lid, cornea
	Trigeminal: Maxillary	Sensory: Skin of lower eyelid, skin of cheek, skin of lateral nose, upper lip, upper teeth and gum, mucous membrane of nasal cavity, hard and soft palate, cheek			Numbness to cheek, lower lid, lateral nose, upper teeth, palate, nasal cavity
	Trigeminal: Mandibular	Sensory: Skin of lower lip, skin of chin, skin of temple and anterior to ear, lower teeth and gums, anterior 2/3 of tongue			Numbness to lower lip, chin, lower teeth, tongue (2/3), sublingual fossa, temporalis, medial lateral pterygoids, masseter. Difficulty chewing
		Motor: mastication			
VI	Abducens	Motor: moves eye laterally			Double vision
VII	Facial	Motor: Somatic - muscles of facial expression			Facial expression, paralysis of face (Bell's palsy), eye can't close tightly, reduced saliva, loss of tears-dry eye
		Parasympathetic: Visceral - Submandibular and sublingual glands		Submandibular ganglion	
		Parasympathetic: Visceral - lacrimal gland and mucous glands of the nasal and oral cavities		Pterygopalatine ganglion	
		Special: Special - Taste to the anterior (2/3) of tongue, Somatic - skin of posterior ear	Geniculate ganglia		

VIII	Vestibulochoclear	Special: hearing- cochlear Balance- vestibular	Spiral vestibular		Loss of hearing and/or balance (dizzy)
IX	Glossopharyngeal	Motor: stylopharyngeus muscle			Dry mouth, dysphagia, loss of sensation on pharynx
		Parasympathetic: parotid salivary glands		Otic ganglion	
		Sensory: <u>Special</u> - taste to posterior 1/3 of tongue <u>Somatic</u> - tympanic membrane and middle ear. <u>Visceral</u> - mucous membrane of pharynx wall, posterior 1/3 of tongue, carotid body and carotid sinus	Superior inferior glossopharyngeal		
X	Vagus	Motor: <u>Somatic</u> - to the muscles of the pharynx, soft palate, larynx			Pharynx- motor side of swallowing (dysphagia) Larynx- speech (hoarseness)
		Parasympathetic: mucous glands of the pharynx, larynx, smooth muscles for organs in the thorax and abdomen		Terminal ganglia	
		Sensory: <u>Special</u> - taste to the epiglottis	Superior and inferior		
		Sensory: <u>Somatic</u> - tympanic membrane and external auditory meatus	ganglia of		
		Sensory: <u>Visceral</u> - mucous membrane of larynx wall	vagus nerve		
XI	Accessory	Motor: sternocleidomastoid and trapezius			Difficulty turning head against resistance, difficulty shrugging shoulders
XII	Hypoglossal	Motor: intrinsic/extrinsic muscles to tongue			Slurred speech, unintelligible speech, tongue deviates from midline or protrusion of the tongue